

REMARKS

Claims 1, 2, 4-11 and 13-27 remain pending in the present application. Claims 4-6, 8-10 and 14-21 are withdrawn from consideration at this time. Claims 3 and 12 have been cancelled. Claims 1, 2, 4, 7, 8, 10, 13, 14 and 22-26 have been amended. Claim 27 is new. Basis for the amendments and new claims can be found throughout the specification, claims and drawings originally filed.

REJECTION UNDER 35 U.S.C. § 102/ § 103

Claims 1, 2, 13 and 26 are rejected under 35 U.S.C. § 102(b) as being anticipated by Watt (U.S. Pat. No. 4,127,105). Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Watt (U.S. Pat. No. 4,127,105) in view of Inoue (U.S. Pat. No. 6,016,966). Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Watt (U.S. Pat. No. 4,127,105) in view of Benedict (U.S. Pat. No. 5,421,169). Claims 22 through 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Watt (U.S. Pat. No. 4,127,105) in view of Iritani, et al. (U.S. Pat. No. 5,983,652). Claims 3 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Watt (U.S. Pat. No. 4,127,105) in view of Nagakabe (Pat. No. JP02000022377A).

In amended Claim 1 and Claim 22 of the present invention, the first radiator (33) is disposed at a first side of the refrigerant vessel (32) to communicate with the vapor outflow passage of the refrigerant vessel, and the second radiator (33) is disposed at a second end side opposite to first end side, to communicate with the vapor outflow passage. Further, the vapor outflow passage is provided in the refrigerant vessel to

extend in a direction crossing with a vertical direction. Thus, even when the boiling cooler is inclined as shown in Fig. 21, the refrigerant vapor produced by the boiling in the refrigerant vessel (32) rises along the inclined upper side, and flows into the tank (36) of the inclined upper one among the first and second radiators. That is, even when the refrigerant vessel (32) is inclined so that the vapor outflow passage is inclined, because the first and second radiators are provided at both sides of the refrigerant vessel, boiling and condensation operation of the refrigerant can be effectively performed.

In Watt (USP '105), a heat pipe (12) is provided for returning condensed liquid refrigerant to an evaporation portion. Therefore, it is unnecessary to provide a condensation section at a lower side of the evaporation section. Further, there is nothing described regarding first and second radiators as is now defined in the present invention, as well as the vapor outlet passage now defined in the present invention.

In Benedict ('169), there is provided first and second radiators for refrigerant of a vapor-compression refrigerant cycle and cooling water. In this case, the refrigerant is forcibly circulated by a compressor, and is circulated in the vapor-compression refrigerant cycle. Further, there is nothing provided with regards to the vapor outflow passage and the refrigerant vessel communicating with both the first and second radiators, as is now defined in the present invention. Further, in Benedict ('169), a water supply to the first and second radiators is switched in accordance with a heating/cooling switching operation. That is, the object of the two radiators of Benedict ('169) is completely different from the present invention.

Further, each of JP 2000-22377, Inoue ('966) and Iritani ('652) cited by the Examiner does not teach the features of amended Claim 1 of the present invention.

Thus, Applicant believes Claims 1 and 22, as amended, patentably distinguish over the art of record. Likewise, Claims 2, 7, 11, 13 and 23-26 which ultimately depend from Claims 1 or 22 are also believed to patentably distinguish over the art of record. Claims 3 and 12 have been cancelled. Reconsideration of the rejection is respectfully requested.

REJOINDER

Applicant respectfully requests the rejoinder of withdrawn Claims 4-6, 8-10 and 14-21.

NEW CLAIM

Claim 27 is a dependent claim which depends from Claim 1. Applicant believes that Claim 27 reads on the elected species.

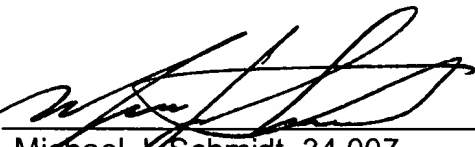
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the

Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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